UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

CARNEGIE INSTITUTION OF WASHINGTON,

M7D CORPORATION,

Plaintiffs,

v.

PURE GROWN DIAMONDS, INC.,

IIA TECHNOLOGIES PTE. LTD D/B/A
IIA TECHNOLOGIES,

Defendants.

Civil Action No. 1:20-cv-00189-JSR

PLAINTIFFS' MEMORANDUM OF LAW
IN OPPOSITION TO DEFENDANTS' MOTION TO DISMISS THE COMPLAINT

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I. INTRODUCTION

The patents-in-suit, U.S. Patent No. 6,858,078 and RE41,189, do not claim natural phenomena or a law of nature. Instead, the '078 claims are directed to patent-eligible processes for large-scale production of high-quality synthetic diamonds, and the '189 claims are directed to patent-eligible processes for improving the quality of synthetic diamonds. Furthermore, Plaintiffs' Complaint more than adequately pleads direct, induced, and willful infringement. Defendants' motion to dismiss should therefore be denied. At a minimum, Plaintiffs should be granted leave to file an amended complaint to cure any deficiencies that the Court may identify.

II. BACKGROUND

A. Factual Background

Defendants are sister companies that manufacture and market clear, gem-quality, lab-grown diamonds made by a microwave plasma chemical vapor deposition ("MPCVD") process. Those synthetic diamonds are made, used, offered for sale, and sold in and/or imported to the United States.

1. Defendant Pure Grown Diamonds, Inc. ("PGD")

PGD imports and sells lab-grown chemical vapor deposition ("CVD") diamonds. PGD describes the process for manufacturing its diamonds as "cultivat[ing] incredible diamonds in a Microwave Plasma Chemical Vapor Deposition chamber from a small carbon seed." ECF No. 1 ("Compl.") ¶ 81. As PGD's website explains, its manufacturing process proceeds as follows:

> A diamond seed is placed inside a low-pressure microwave chamber. Hydrogen and methane gases are introduced. A microwave generator pumps energy into the chamber that ignites a glowing plasma ball. Carbon molecules rain on the seed. Crystallization begins. The process is completed within 42 to 70 days.

Id. ¶¶ 82–84. PGD represents that the CVD diamonds it markets are gem-quality, Type IIA diamonds that "contain[ ] no nitrogen or any other trace element ... result[ing in] the brightest and

most transparent diamond possible." *Id.* ¶¶ 85–86.

PGD has its headquarters, principal place of business, and showroom in New York City. *See* Compl. ¶¶ 9–17, 24, 50. From its United States locations, PGD buys, makes, has made, offers for sale, sells, and uses CVD diamonds, including annealed diamonds, both as individual diamonds and as bridal jewelry. *See id.* ¶¶ 18–24. PGD also offers for sale and sells these diamonds to third-party diamond sellers, retailers, and other entities, including 300 retail stores in this country. *Id.* ¶¶ 21–23, 27–28, 52–57. PGD also partners with diamond retailers and provides branding, training, and other support. *Id.*¶¶ 25–26.

PGD describes 2AT as its "sister company," with PGD operating as the exclusive retailer and distributor of diamonds grown by 2AT. *Id.* ¶¶ 34, 39. PGD imports CVD diamonds into the United States, including CVD diamonds manufactured or annealed by 2AT. *Id.* ¶¶ 42–43.

2. Defendant IIa Technologies Pte. Ltd ("2AT")

2AT claims to produce "pure diamonds which are colourless" using an MPCVD process that was an improvement over prior CVD and high-pressure/high-temperature (HPHT) methods. *Id.* ¶ 88. According to 2AT, its process "work[s] at lower temperatures" and exposes "diamond multiple seeds" in an environment conducive to crystallization, resulting in "unparalleled" "gem-quality diamonds that pure Type IIa diamonds." *Id.* ¶¶ 88–90. The resulting diamonds are used as gems and in jewelry and other applications. *Id.* ¶ 91.

2AT is based in Singapore. *Id.* ¶¶ 35–38. It manufactures and anneals some of PGD's diamonds in Singapore. *Id.* ¶¶ 32–33, 88. 2AT has a "Global Group" of "technology and supply chain partners" through which it manufactures, uses, offers for sale, sells, distributes, lab-grown rough, specialized, semi-finished, and finished CVD diamonds in the United States and/or imports such CVD diamonds into the United States. *See id.* ¶¶ 40, 43, 87.

B. The Patents-in-Suit

Both patents-in-suit involve technology developed by Plaintiff Carnegie Institution of Washington and licensed to Plaintiff M7D Corporation. Both patents are well-known in the lab-grown diamond industry. *Id.* ¶¶ 29, 44.

The '078 patent claims methods of manufacturing CVD diamonds by controlling temperature gradients of a growth surface of the diamond and other parameters such as the pressure in the deposition chamber and the temperature of the growth surface. Claims 1 and 12 recite:

1. A method for diamond production, comprising: controlling temperature of a growth surface of the diamond such that all temperature gradients across the growth surface are less than 20° C.; and growing single-crystal diamond by microwave plasma chemical vapor deposition on the growth surface at a growth temperature in a deposition chamber having an atmosphere with a pressure of at least 130 torr.	12. A method for diamond production, comprising: controlling temperature of a growth surface of the diamond such that all temperature gradients across the growth surface are less than 20° C.; and growing single-crystal diamond by microwave plasma chemical vapor deposition on the growth surface at a temperature of 900-1400° C.

ECF No. 1-1 ("the '078 patent") at 14:64–15:4, 15:31–37.

The '189 patent claims methods of improving the optical clarity of CVD diamonds by annealing them at prescribed temperatures and pressures. Claim 1 recites:

> 1. A method to improve the optical clarity of CVD diamond where the CVD diamond is single crystal CVD diamond, by raising the CVD diamond to a set temperature of at least 1500° C. and a pressure of at least 4.0 GPA outside of the diamond stable phase.

ECF No.1-2 ("the '189 patent") at 4:10–14.

C. Procedural Background

Plaintiffs filed their Complaint against Defendants on January 9, 2020. ECF No. 1. Plaintiffs contend that Defendants make their CVD diamonds using manufacturing processes claimed in the '078 patent, *id*. ¶¶ 81–86, 94–96, 98–100 (PGD); ¶¶ 87–91, 94, 97–100 (2AT), and

annealing processes claimed in the '189 patent, *id*. ¶¶ 81–86, 118–21, 123–27, 129–35, 137–41 (PGD); ¶¶ 87–91, 118–20 122–34, 136–41 (2AT). Plaintiffs contend that Defendants have directly infringed the '078 and '189 patents by using the claimed methods to make CVD diamond products in the United and/or by using, offering to sell, selling or importing products that were made abroad by processes covered by the patents. Compl. ¶¶ 92–106, 118–130; *see* 35 U.S.C. §§ 271(a), 271(g). Plaintiffs further allege that Defendants have induced infringement of the '078 and '189 patents by intentionally causing others to use, offer to sell, sell and/or import products made by the patented processes. *Id.* ¶¶ 107–14, 131–38; *see* 35 U.S.C. § 271(b). Plaintiffs also allege that Defendants have engaged in willful infringement of the '078 and '189 patents by continuing to infringe despite knowledge of both the patents and their infringement of the patents. *Id.* ¶¶ 115–17, 139–41.

In accordance with Local Patent Rule 6, Plaintiffs served infringement contentions on March 11, 2020. Discovery is ongoing—the parties responded to each other's initial discovery requests on April 10, 2020. The parties are currently briefing claim construction issues.

III. LEGAL STANDARD

A. The *Mayo*/*Alice* Test

Under Section 101 of the Patent Act, "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." 35 U.S.C. § 101. The Supreme Court has held, however, that this broadly worded provision contains an "implicit exception": "Laws of nature, natural phenomena, and abstract ideas are not patentable." *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70 (2012) (citations and internal quotation marks omitted). The Supreme Court in *Mayo* laid out a framework distinguishing improper attempts to patent natural laws and natural phenomena themselves from proper efforts to patent practical applications of natural laws and natural phenomena. *Id*. at 72–

73. The Supreme Court refined this framework in *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014), a case involving the "abstract ideas" exception, and courts have since referred to this inquiry as the *Alice* test or *Mayo*/*Alice* test.

The *Mayo/Alice* test has two steps. "[D]istinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts" first requires a court to determine whether the claims at issue are "directed to" a patent-ineligible concepts. *Id*. at 217. If the answer is no, the inquiry ends—the claims are patent-eligible. If the answer is yes, a court must proceed to step two and determine whether the claims nonetheless recite "an inventive concept—*i.e.*, an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Id*. at 217–18 (citation and internal quotation marks omitted) (alteration in original). In determining whether claims present such an inventive concept, courts consider whether the additional limitations were "well-understood, routine and conventional to a skilled artisan in the relevant field" at the time of the asserted invention. *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018). This is a factual issue, *id.*, and the party challenging the patent carries the burden of proving it by clear and convincing evidence, *Microsoft Corp. v. I4I Ltd. P'ship*, 564 U.S. 91, 97 (2011).

Because the *Mayo/Alice* test turns on what the patentee has claimed and how, courts often need to construe the claims before determining whether they are patent-eligible. If the court does not wait for claim construction, it should view the claims in the light most favorable to the patentee. *See Data Distrib. Techs., LLC v. BRER Affiliates, Inc.,* No. CIV. 12-4878 JBS/KMW, 2014 WL 4162765, at *6 (D.N.J. Aug. 19, 2014).

In some cases, courts may apply the *Mayo*/*Alice* test on a motion to dismiss. As noted above, however, the step two inquiry includes a factual component. On a motion to dismiss or a

motion for judgment on the pleadings, the court must accept all plausible factual allegations in the patentee's complaint. *See Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1126, 1129–30 (Fed. Cir. 2018); *see also Berkheimer*, 881 F.3d at 1370 (genuine issues of material fact precluding summary judgment of ineligibility).

B. The *Iqbal*/*Twombly* Standard for Granting Motions to Dismiss

On a motion to dismiss for failure to state a claim, a court must accept as true all factual allegations in the Complaint. *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009). Federal Rule of Civil Procedure 12(b)(6) permits dismissal of a complaint only where it lacks "sufficient factual matter, accepted as true, to 'state a claim for relief that is plausible on its face.'" *Id*. (citation omitted); *see also Holotouch, Inc. v. Microsoft Corp.*, No. 17 CIV. 8717 (AKH), 2018 WL 2290701, at *8 (S.D.N.Y. May 18, 2018) ("The central question is whether the complaint, assumed as true and taken with all reasonable inferences, raises a plausible claim for relief."). This is a "context-specific task that requires the reviewing court to draw on its judicial experience and common sense." *Iqbal*, 556 U.S. at 679. Dismissal is improper so long as the factual allegations "raise a right to relief above the speculative level." *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 555 (2007).

IV. THE PATENTS-IN-SUIT ARE NOT DIRECTED TO PATENT-INELIGIBLE NATURAL PHENOMENA OR LAWS OF NATURE.

A. Under Section 101 of the Patent Act, Practical Applications of Laws of Nature and Other Natural Phenomena Are Patent-Eligible.

For over 100 years, the Supreme Court has distinguished between natural laws and other natural phenomena themselves, which are not patent-eligible, and patents on practical applications of natural laws and phenomena, which are patent-eligible.

In *O'Reilly v. Morse*, 56 U.S. 62 (1853), for example, the Court held that Samuel Morse's patent on an electromagnetic telegraph claimed a patentable application of a law of nature. *Id*. at 111. A few years later, the Supreme Court upheld a claim in Alexander Graham Bell's telephone

patent that recited a method and apparatus for "transmitting vocal or other sounds telegraphically . . . by causing electrical undulations, similar in form to the vibrations of the air accompanying the said vocal or other sounds." *Dolbear v. Am. Bell Tel. Co.*, 8 S. Ct. 778, 780 (1888). Specifically, the Court found that although electricity was a force of nature, "left to itself, [it would] not do what is wanted," and the patent disclosed the patent-eligible concept of "controlling the force as to make it accomplish the purpose." *Id*. at 781.

In contrast, the Court has rejected claims to patent unaltered products of nature. In *Funk Brothers Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127 (1948), for example, the inventor discovered that certain forms of nitrogen-fixing bacteria could mix with each other without inhibiting their nitrogen-fixing capacity. *Id*. at 129–30. This mixture was useful because it allowed farmers to "inoculate" various types of seeds with a single bacterial mixture, rather than buying a seed-specific culture designed for each type of seed. *Id*. at 130. The Supreme Court held the new mixture unpatentable because "[t]he qualities of these bacteria, like the heat of the sun, electricity, or the qualities of metals, are part of the storehouse of knowledge of all men." *Id.* The Court observed that "[i]f there is to be invention from such a discovery, it must come from the *application of the law of nature to a new and useful end*." *Id*. at 130–31 (emphasis added).

When patentees have synthesized new products not found in nature, the Supreme Court has upheld patents on those items. In *Diamond v. Chakrabarty*, the Court found patent-eligible a single, genetically engineered bacterium capable of doing the hydrocarbon-degrading work of four naturally occurring strains. 447 U.S. 303, 305 & n.1 (1980). The Court concluded: "[In] contrast [to the patentee in *Funk Brothers*], the [inventor] has produced a new bacterium with markedly different characteristics from any found in nature and one having the potential for significant utility. His discovery is not nature's handiwork, but his own; accordingly, it is patentable subject

matter under § 101." *Id*. at 310.

Similarly, in *Diamond v. Diehr*, 450 U.S. 175 (1981), the Supreme Court overturned the Patent Office's rejection under Section 101 of a process for curing synthetic rubber. While the process employed a well-known mathematical equation, the patentee did not seek to pre-empt the use of the equation. *Id*. at 187. Rather, the patentee sought protection for use of the mathematical equation in conjunction with other steps in an industrial process. *Id*. The Court explained that it was "commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection." *Id*.

The lesson from these cases is that a patent directed to man-made inventions—as opposed to a patent directed to the discovery of natural phenomenon—is patent-eligible under Section 101. Inventions applying a law of nature, for example, exploiting electromagnetism or vibrations for communications purposes, are also patent-eligible. As the Patent and Trademark Office has explained in its Manual of Patent Examining Procedure:

> [A] claim that recites a judicial exception is "A machine comprising elements that operate in accordance with F = ma." This claim recites the principle that force equals mass times acceleration (F = ma) and is therefore directed to a law of nature exception …. Because this claim is directed to a judicial exception . . ., it requires further analysis [under step two of the *Alice/Mayo* test]. An example of a claim that merely involves, or is based on, an exception is a claim to "A teeter-totter comprising an elongated member pivotably attached to a base member, having seats and handles attached at opposing sides of the elongated member." This claim is based on the concept of a lever pivoting on a fulcrum, which involves the natural principles of mechanical advantage and the law of the lever. However, this claim does not recite these natural principles and therefore is not directed to a judicial exception . . . . Thus, the claim is eligible without further analysis.

MPEP § 2106.04.

B. At Step One, the Patents-in-Suit Are Directed to Non-Natural Methods for Making Synthetic Diamonds.

At step one of the *Mayo*/*Alice* test, the Court must determine whether the claims at issue

are "directed to" a patent ineligible concept. *Nat. Alts. Int'l, Inc. v. Creative Compounds, LLC*, 918 F.3d 1338, 1342 (Fed. Cir. 2019) (citing *Alice*, 573 U.S. at 217). "[T]he directed to inquiry applies a stage-one filter to claims, considered in light of the specification, based on whether their character as a whole is directed to excluded subject matter." *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (citations and internal quotation marks omitted). The Supreme Court has cautioned against "too broad an interpretation of this exclusionary principle [that] could eviscerate patent law. For all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." *Mayo*, 566 U.S. at 71.

1. The '078 Patent

The '078 patent describes a method facilitating large-scale production of "large, high-quality diamonds" superior in quality and faster in production than what was known. *See, e.g.*, '078 patent at 1:64–2:4, 13:18–35. Defendants argue that "[t]he asserted claims of the '078 Patent . . . quantify a well-known natural law that a uniform temperature across a crystal growth surface produces crystals with fewer defects." ECF No. 29 ("Mot.") at 16. But the claims of the '078 patent are directed to a non-natural method of making synthetic diamonds by a CVD process. Specifically, the '078 patent discloses methods for growing single-crystal diamonds under precise temperature and pressure conditions through microwave chemical vapor deposition. '078 patent at 6:51–54. Defendants do not and cannot suggest that this controlled process for growing crystals occurs in nature. Mother Nature does not engage in microwave plasma chemical vapor deposition on a growth surface, much less carefully control temperatures and pressures used in such processes.

The claims of the '078 patent are not directed to merely extracting a naturally-occurring gem or otherwise mimicking what occurs within the Earth's mantle, but instead to forming a synthetic crystal by creating conditions not found in nature. Specifically, the '078 patent is directed to, and claims, a method of using microwave generated plasma in a chemical vapor

deposition process at certain temperature and/or pressure conditions to grow a CVD diamond in days rather than millions of years. Nature is capable of amazing things, but the use of a CVD process under the claimed conditions to create a synthetic diamond is not one of them.

The claims thus are not merely "'directed to' … observing or identifying [an] ineligible concept itself." *Rapid Litig. Mgmt. Ltd. v. CellzDirect, Inc.*, 827 F.3d 1042, 1048 (Fed. Cir. 2016). Rather, they are permissibly directed to a man-made alternative to the natural diamond production process. *See Kaneka Corp. v. Zhejiang Med. Co.*, No. CV 11-02389 SJO (SHSx), 2018 WL 2718036, at *16 (C.D. Cal. Apr. 5, 2018) (holding that a process for producing a compound "on an industrial scale" is not "directed to" component bacteria's natural ability to produce that compound), *aff'd sub nom. Kaneka Corp. v. Xiamen Kingdomway Grp. Co.*, 767 F. App'x 998 (Fed. Cir. 2019). The claims are not simply directed to "nature's handiwork, but [the inventors'] own." *Chakrabarty*, 447 U.S. at 310.

The invention of the '078 patent is performed in a laboratory and differs fundamentally from the invention in *American Axle & Mfg. Co. v. Neapco Holdings LLC*, 939 F.3d 1355, 1358 (Fed. Cir. 2019). As an initial matter, *American Axle* involved a motion for summary judgment, which means that, unlike here, the district court the Federal Circuit had the benefit of materials outside the pleadings presented by both parties. What is more, the patent in *American Axle* related to a method for manufacturing automotive propeller shafts with liners that were designed to attenuate vibrations transmitted through a shaft assembly. *Id*. at 1358. The Federal Circuit concluded that the "claims' general instruction to tune a liner amounts to no more than a directive to use one's knowledge of Hooke's law," an "equation that describes the relationship between an object's mass, its stiffness, and the frequency at which the object vibrates." *Id*. at 1360, 1364.

Unlike the patent in *American Axle*, the '078 patent does not claim a natural law. There is

no natural law that all temperature gradients across a synthetically grown diamond will or should have temperature gradients less than 20°C. Plaintiffs assert there is a "well-known natural law that a uniform temperature across a crystal growth surface produces crystals with fewer defects," but they have not proven that and the '078 patent does not claim any such law. The patent claims methods of growing CVD diamonds at particular controlled temperature and pressure conditions.

This case is more analogous to *Natural Alternatives*, 918 F.3d at 1350, in which the Federal Circuit reversed a judgment on the pleadings that a patent directed to manufacturing a dietary supplement were invalid for claiming a combination of naturally occurring phenomena. The Court found the claims were not "directed to the natural law or product of nature," and instead were "an application of the law and new use of that product." *Id*. The Federal Circuit reasoned that it could not see "how a claim to the manufacture of a non-natural supplement would be directed to the law of nature or natural product." *Id*. Likewise here, claims directed to techniques for manufacturing non-natural crystals are not directed to a law of nature or a natural product.

2. The '189 Patent

The '189 patent teaches a method of applying higher temperature and pressure to a CVD single-crystal diamond to improve its color and optical clarity. The annealing method claimed by the '189 patent has no analog in nature. Defendants describe claim 1 as "expressly recit[ing] an unpatentable natural phenomenon—the effect of applying certain [high pressure, high temperature] conditions to a diamond." But Defendants do not—and cannot—point to anything in the Complaint or the patent even suggesting that any process for annealing CVD diamonds is found in nature, let alone processes at the specific temperature and pressure conditions claimed.

Defendants do not say what the mean by "HPHT," so it is unclear what particular pressure and temperature conditions they allege are natural phenomena. Pressures and temperatures higher than atmospheric pressure and room temperature exist in the Earth's mantle, but Defendants

provide no evidence that the *specific claimed* pressure and temperature conditions are found there. Moreover, although natural diamonds may have been subjected to certain pressure and temperature conditions hundreds of thousands of years ago, those conditions persisted for eons. In contrast, the claims of the '189 patent call for applying particular pressure and temperature conditions not to natural diamonds, but to synthetic CVD diamonds. Moreover, the claimed conditions must occur "outside the diamond stable phase," whereas Mother Nature, to be sure, keeps natural diamonds in their "stable phase." A skilled artisan would unquestionably understand the claims to apply pressure and temperature conditions on a human timescale, not a geological one. *See, e.g.*,'189 patent at 4:22–34. Properly understood, the challenged claims are much closer to the claims covering the human-modified bacteria in *Chakrabarty* than to the unmodified, naturally-occurring bacteria in *Funk Brothers*. CVD diamonds do not occur in nature, and the claimed processes for treating CVD diamonds surely have not occurred in nature.

Much of Defendants' analysis under step one focuses on whether claim 1 is conventional, routine, or well understood. Mot. at 7–8. That analysis is misplaced. Whether a patent *otherwise directed to patent-ineligible subject matter* sufficiently improves upon existing technological processes to "'transform the process into an inventive application' of the patent-ineligible concept" is an inquiry undertaken only at *step two* of the *Mayo*/*Alice* framework, after the claims have been determined to be directed at a patent-ineligible concept. *Rapid Litig. Mgmt.*, 827 F.3d at 1050 (alteration omitted) (quoting *Alice*, 573 U.S. at 223). Defendants' argument that the claimed techniques were not inventive has no bearing on whether the claims are directed to a natural phenomenon in the first place and thus improperly "collapses the inquiry into a single step." *Id.* The Court should disregard these arguments under step one.

Defendants' step one boils down to just a conclusory assertion that the claims are directed

to a natural phenomenon. Mot. at 7. This is insufficient as a matter of law.

C. The Court Need Not Analyze Step Two Because the Claims Are Not Directed to a Natural Phenomenon, But They Include Inventive Concepts Nonetheless.

If a court finds that a patent is directed to an ineligible concept, it must then ask whether the claim elements, considered both individually and "as an ordered combination," "transform the nature of the claim" into a patent-eligible claim to application of the concept. *Alice*, 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 78–79). If, however, the court finds at step one that the claims of a patent are directed to patent-eligible subject matter, the inquiry ends. *See, e.g., Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253, 1262 (Fed. Cir. 2017) (declining to proceed to step two after concluding at step one that the claims were not directed to an abstract idea).

Here, because the patents-in-suit are not directed to a natural law or natural phenomenon, the Court need not analyze them under *Mayo*/*Alice* step two. But even if the Court proceeds, the claims here cannot be dismissed under step two, either.

Defendants spill much ink arguing that the patents "do not recite new or useful process steps" and instead recite "well-understood, routine, conventional activity, previously engaged in by those in the field." Mot. at 10, 16 (citation omitted). But in support, Defendants rely extensively on materials outside the pleadings. *See* Mot. at 4–6, 12, 15–16. Specifically, they cite eight U.S. and European patents and patent publications (Exhibits A, B, F, and J-N) and five magazine and journal articles (Exhibits C, D, H, I and O) for the proposition that HPHT processes and process recipes for growing CVD diamonds have been known for decades. Mot. at 3–5, 12, 16.

Defendants commit a fundamental error in relying on these materials outside the pleadings in a Rule 12(b)(6) motion. Under Rule 12(d), if matters outside the pleadings are considered, "the motion must be converted into one for summary judgment pursuant to Rule 56 and the parties given a reasonable opportunity to present all pertinent material." *Fink v. Time Warner Cable*, No. 08

CIV. 9628 LTS KNF, 2009 WL 2207920, at *3 (S.D.N.Y. July 23, 2009) (excluding materials outside the pleadings when considering a Rule 12(b)(6) motion); *see also Glob. Network Commc'ns, Inc. v. City of New York*, 458 F.3d 150, 155 (2d Cir. 2006). Plaintiffs have not been provided that opportunity here and request an extension of time to respond if the Court is inclined to consider such material. Whether something is "well-understood, routine, and conventional" is a factual question, *see Berkheimer*, 881 F.3d at 1368, and Plaintiffs deserve time to develop the facts.

Nevertheless, even at this point the Court can readily conclude that Defendants' evidence is unavailing. Defendants argue that the general concept of using HPHT techniques to grow CVD diamonds was known. But that is not what these patents claim. The '078 and '189 claims require specific temperature and pressure parameters, and the '078 claims also require certain levels of temperature gradients. Defendants have not come close to showing that the specific process parameters of these claims were well-understood, routine, and conventional in this art.

Ultimately, Defendants are trying to argue that Plaintiffs' patent claims are invalid over prior art. But those are heavily factual inquiries under Sections 102 and 103 of the Patent Act, and they are plainly premature at this threshold stage of the litigation, when the claims have not been construed, fact discovery has barely begun, and expert testimony (which will be critical in a technical field such as this) is months away.

V. PLAINTIFFS' COMPLAINT SATISFIES *IQBAL* AND *TWOMBLY*

A. Plaintiffs adequately pleaded direct infringement.

Plaintiffs "need not 'prove [their] case at the pleading stage,' [but rather] must place the 'potential infringer . . . on notice of what activity . . . is being accused of infringement.'" *Nalco Co. v. Chem-Mod, LLC*, 883 F.3d 1337, 1350 (Fed. Cir. 2018) (citations omitted). The Complaint does so.

Under § 271(g), a defendant is liable for infringement if it "imports into the United States or offers to sell, sells, or uses within the United States *a product which is made by a process* patented

in the United States" during the term of the process patent. 35 U.S.C. § 271 (emphasis added). Under § 271(g), the fact that the *process* is performed abroad or by someone else is irrelevant as long as the resulting *product* is imported, sold, offered for sale, or used in this country. The Complaint more than adequately alleges each element of a product-by-process infringement claim.

To begin with, the Complaint identifies both the asserted claims (at least '078 claims 1 and 12 and '189 claim 1), *see* Compl. ¶¶ 69–75, 94, 107, 115, 120, 131, 139, and the products that are alleged to have been made by those claimed methods (PGD's and 2AT's CVD diamond product lines including annealed CVD diamonds).

The Complaint also explains why Plaintiffs believe that PGD's and 2AT's CVD diamonds have been made by processes covered by the '078 and '189 patents. According to PGD's own website, its CVD diamonds are created by placing a "diamond seed" inside a low-pressure microwave chamber with hydrogen and methane gases, using a microwave generator pump to ignite a glowing plasma ball which makes carbon molecule rain down on the seed, resulting in crystallization and Type IIA diamonds over a 42 to 70-day process, with "the brightest and most transparent diamond[s] possible" without "nitrogen or any other trace element." *Id*. ¶¶ 82–86. Similarly, 2AT describes its CVD process as using microwave plasma chemical vapor deposition (MPCVD) at "lower pressures" and on multiple "diamond seeds" in an "environment conducive to crystallization," resulting in "gem-quality .... pure Type IIa diamonds." *Id.* ¶¶ 88–90. Although Plaintiffs have not yet had access to PGD's or 2AT's non-public manufacturing documents, Plaintiffs have plausibly alleged that the CVD process used to make PGD's and 2AT's CVD diamond products requires heightened temperature and atmospheric pressure and control of temperature gradients as specified in claims 1 and 12 of the '078 patent. *See id.* ¶¶ 94–96, 98–100 (PGD); *id.* ¶¶ 94, 97–100 (2AT). The Complaint likewise explains why Plaintiffs believe that

PGD's and 2AT"s CVD Diamonds are annealed in a manner infringing the '189 patent. *Id.* ¶¶ 120–21, 123–26 (PGD); *id.* ¶¶ 120, 122–26 (2AT).

Finally, the Complaint alleges that both Defendants have imported CVD diamonds made by the patented processes into this country, *id.* ¶¶ 18, 31, 42–43, 51, 53, 55, 57, 62, 81, 93–94, 106, 119–20, 130 (PGD); *id.* ¶¶ 40, 43, 46, 59, 87, 91, 93–94, 106, 119–120, 130 (2AT); used those products in this country, including in New York, *id.* ¶¶ 18, 21, 51, 53, 55–57, 81, 93–94, 119, 130 (PGD); *id.* ¶¶ 21, 59, 87, 94, 119, 130 (2AT); and/or sold those products or offered them for sale in this country, *id.* ¶¶ 18, 28, 51, 53, 55–57, 62, 93, 104, 119, 129–30 (PGD); *id.* ¶¶ 58–60, 91, 93, 105–06, 119, 129–30 (2AT).

Defendants' objections are unavailing. Defendants assert that the Complaint fails to sufficiently identify the accused products, *see* Mot. at 19, but Plaintiffs are not accusing a single specific diamond. Based on the information available, Plaintiffs have asserted that PGD's and 2AT's entire CVD diamond product line is made by processes that infringe one or both patents. Defendants may deny the allegations, but they are on full notice of what Plaintiffs have alleged. Defendants further grumble that the Complaint "tautologically defines" PGD's and 2AT's CVD diamonds as "infringing CVD diamonds" even though Plaintiffs' patent claims are in method-claim format. *See id.* at 20. But Plaintiffs are asserting a product-by-process infringement theory, which requires not only a process but a product made by an infringing process. It therefore makes perfect sense for the Complaint to refer to Defendants' products as allegedly "infringing CVD diamonds" or "infringing CVD diamond products." *See* Compl. ¶ 94 (defining terms). In any event, Defendants' objection is semantic.

Defendants also claim not to know what processes are alleged to infringe and why. *See* Mot. at 20–21. But complaints need not prove infringement—that is what fact and expert

discovery, summary judgment motions, and trial are for. Complaints need only provide notice of plausible infringement claims. *See, e.g., K-Tech Telecomms., Inc. v. Time Warner Cable, Inc.*, 714 F.3d 1277, 1282 (Fed. Cir. 2013) ("Federal Rule of Civil Procedure 8(a)(2) 'generally requires only a plausible "short and plain" statement of the plaintiff's claim,' showing that the plaintiff is entitled to relief." (citations omitted)); *see also Lifetime Indus., Inc. v. Trim-Lok, Inc.*, 869 F.3d 1372, 1376 (Fed. Cir. 2017) ("To survive a motion to dismiss under Rule 12(b)(6) a complaint must 'contain sufficient factual matter, accepted as true, to "state a claim to relief that is plausible on its face."'" (quoting *Iqbal*, 556 U.S. at 678)). Plaintiffs have explained why they believe that the processes used to manufacture PGD's and 2AT's CVD diamond products infringe each element of three recited claims—more than is required. *See, e.g.*, *K-Tech*, 714 F.3d at 1284 (no requirement to "specifically include each element of the claims of the asserted patent[s]").

Defendants rely on *Atlas IP, LLC v. Exelon Corp.*, 189 F. Supp. 3d 768, 775 (N.D. Ill. 2016), *aff'd sub nom. Atlas IP, LLC v. Commonwealth Edison Co.*, 686 F. App'x 921 (Fed. Cir. 2017), and *L-7 Designs, Inc. v. Old Navy, LLC*, 647 F.3d 419, 428 (2d Cir. 2011), but neither is on point. In *Atlas*, the factual allegation did not even "permit [the] court to infer" infringement. 189 F. Supp. 3d at 775. And *L-7* was a non-patent case where the only specific allegation was contradicted by evidence of record. Regardless of whether Defendants agree with the Complaint's allegations, and regardless of whether Defendants could hypothetically manufacture and anneal CVD diamonds in ways not infringing the patents, the Complaint's allegations are sufficient. *See, e.g., NNCrystal US Corp. v. Nanosys, Inc.*, No. CV 19-1307-RGA, 2020 WL 616307, at *3 (D. Del. Feb. 10, 2020) (denying motion to dismiss where complaint alleged defendants' method met all limitations of two asserted claims, regardless of whether defendant could have used "many non-patented ways of synthesizing its products"); *see also K-Tech*, 714 F.3d at 1284 (complaint need

not "preemptively identify and rebut potential non-infringing alternatives to practicing the claims of an asserted patent").

Defendants further demand that Plaintiffs plead at the outset the specific temperatures, temperature gradients, and pressures at which Defendants grow and anneal their diamonds. Mot. at 20–21. But Plaintiffs have not yet been allowed to inspect the fabrication plants Defendants use, review documents detailing the processes they use, and depose the relevant personnel. Defendants' standard would improperly import the heightened specificity required for infringement contentions and proof at trial into Rule 8's pleading requirements. *See* L.P.R. 6 (requiring identification of "each product or process ... of which the party claiming infringement is aware that allegedly infringes each identified claim"); *Nichia Corp. v. VIZIO, Inc.*, No. 2:16-CV-1453-JRG, 2017 WL 3836141, at *2 (E.D. Tex. July 24, 2017) ("[A]llegations to the level of detail contained in infringement contentions are not required at the pleading stage." (citation omitted)); *N. Star Innovations, Inc. v. Micron Tech., Inc.*, No. CV 17-506-LPS-CJB, 2017 WL 5501489, at *3 (D. Del. Nov. 16, 2017) (rejecting argument that a complaint must contain detail equivalent to later-filed infringement contentions). Defendants know what processes they and their suppliers are using, and they cannot and do not suggest that they lack adequate notice to begin defending themselves. Defendants also neglect to mention that Plaintiffs have already provided more detailed infringement contentions, and Plaintiffs will refine those contentions as required by this Court's rules and case law.

Defendants additionally object that "the Complaint does not plausibly allege any acts in the United States that would constitute direct infringement by 2AT" and that "a diamond cannot perform a method." *See* Mot. at 22–23. As explained above, Defendants miss the mark—under 35 U.S.C. § 271(g), Defendants infringe if they "import[] into the United States or offer[] to sell,

sell[], or use[] within the United States a product which is made by a process patented in the United States." Foreign manufacture does not avoid liability.

Defendants' argument that the Complaint's allegations regarding 2AT's importation into the U.S. are "conclusory, baseless, and deserve no weight," Mot. at 23, is likewise mistaken. The Complaint alleges that Defendants are sister companies; that Defendants both represent their CVD manufacturing processes as their own, with 2AT having facilities in Singapore and PGD having headquarters in New York and facilities nationwide; and that both work with and sell to other retailers in the U.S. *See, e.g.*, Compl. ¶¶ 9–18, 21, 25–28, 34–37, 82–86, 88–90, 101, 127–28. Defendants' assertions that they do not perform the claimed methods or do not do so "in the United States," *see* Mot. at 23, are outside the pleadings and cannot be considered as part of Defendants' motion. *See, e.g.*, *Chambers v. Time Warner, Inc.*, 282 F.3d 147, 154–55 (2d Cir. 2002) ("strictly enforc[ing]" prohibition on considering extra-pleading material in a 12(b)(6) context as doing so "is at odds with the liberal pleading standard of [Rule] 8(a)(2)" and "depriv[es] the parties of a fair adjudication of the claims by examining an incomplete record").

Defendants are likewise off-base in asserting that the Complaint should be dismissed for not "alleg[ing] that CVD-grown diamonds are not materially changed by subsequent process before becoming gemstones like the allegedly imported products." Mot. at 23. As explained in *Kyowa Hakka Bio, Co. v. Ajinomoto Co.*, No. CV 17-313, 2018 WL 834583, at *9 (D. Del. Feb. 12, 2018), "This argument is premature. The limits on liability set forth in § 271(g)(1) and (2) have been characterized by the Federal Circuit as 'defenses' or 'exceptions' not as elements of a § 271(g) claim that must be affirmatively pled. This is particularly true with the 'materially changed' provision since it involves factual issues not appropriate for resolution in a Rule 12(b)(6) motion." (citations omitted).

Defendants rely heavily on *Artrip v. Ball Corp.*, 735 F. App'x 708 (Fed. Cir. 2018), *see* Mot. at 20, but that case also involved very different facts. The complaint there was a third amended complaint filed after the plaintiff had been provided access to and taken photos of the machines at issue. The complaint was brief (a mere 23 paragraphs) and contained no factual allegations regarding the defendants' business or accused products. Here, Plaintiffs' Complaint was filed without the benefit of discovery and contains significant factual detail beyond the language of the claims. It does not merely parrot the claims and assert infringement with no further explanation. In any event, this District has no "'anti-parroting' principle, and there is nothing inherently problematic about quoting the language of an allegedly infringed patent." *Holotouch*, 2018 WL 2290701, at *8.

Under *Twombly*, a complaint must only allege "enough fact[s] to raise a reasonable expectation that discovery will reveal evidence of illegal[ity]." 550 U.S. at 556. Given that the details of PGD's and 2AT's CVD and annealing methods and their CVD diamond sales and distribution chains are not public, Plaintiffs have plausibly alleged infringement and provided adequate notice of their direct infringement claims.

B. Plaintiffs adequately pleaded inducement of infringement.

The Complaint likewise plausibly alleges induced infringement. To plead inducement of infringement, a complaint must allege (1) direct infringement, (2) the defendant's knowledge of patents and the infringing acts, and (3) the defendant's intent to cause the acts that constitute the infringement. *See, e.g.*, *MEMC Elec. Materials, Inc. v. Mitsubishi Materials Silicon Corp.*, 420 F.3d 1369, 1378 (Fed Cir. 2005); *Glob.-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 766 (2011). In evaluating the defendant's intent, "direct evidence is not required; rather, circumstantial evidence may suffice." *Carson Optical Inc. v. eBay Inc.*, 202 F. Supp. 3d 247, 253 (E.D.N.Y. 2016) (quoting *MEMC*, 420 F.3d at 1378) (analysis at pleading stage); *see also U.S. Philips Corp.*

v. Iwasaki Elec. Co., 607 F. Supp. 2d 470, 479 (S.D.N.Y. 2009).

The Complaint sufficiently alleges each element of induced infringement.

First, the Complaint alleges direct infringement by others. As discussed above, PGD and 2AT's CVD diamonds are made using processes claimed in the '078 and '189 patents, and those products have been imported, sold, offered for sale, and/or used in the U.S. without Plaintiffs' consent. The Complaint alleges that PGD's and 2AT's customers and retailers use, offer to sell, sell, and/or import those CVD diamonds, thereby infringing directly under § 271(g). Defendants argue that an indirect infringement claim should be dismissed absent a direct infringement allegation. Mot. at 23. But Defendants' reliance on *Gym Door Repairs, Inc. v. Young Equip. Sales, Inc.*, 206 F. Supp. 3d 869, 892 (S.D.N.Y. 2016), is misplaced: Plaintiffs *have* alleged direct infringement.

Second, the Complaint alleges that both Defendants had actual knowledge of or were willfully blind to the patents-in-suit, given the patents' notoriety in the CVD lab-grown diamond industry. Compl. ¶¶ 29, 44; *see Global-Tech*, 563 U.S. at 769–70 (either actual knowledge or willful blindness suffices to establish the knowledge-of-infringement requirement). Furthermore, the Chief Technical Officer of PGD and alleged inventor of its process, Dr. Devi Shankar, is a named inventor on seven patents relating to manufactured diamonds, the earliest of which was filed as recently as 2009. Given Dr. Shankar's status as an inventor in the same field as the patents-in-suit, the Complaint plausibly alleges that PGD and 2AT had actual or constructive knowledge of the patents-in-suit. *See* Compl. ¶¶ 135–36. In any event, "[t]he filing of a complaint is sufficient to provide knowledge of the patents-in-suit for purposes of stating a claim for indirect infringement occurring after the filing date." *See, e.g., Carson*, 202 F. Supp. 3d at 254 (citation omitted); *see also 3D Sys., Inc. v. Formlabs, Inc.,* No. 13 CIV. 7973, 2014 WL 1904365, at *4 (S.D.N.Y. May 12, 2014) ("[I]n this Circuit at least, prefiling knowledge of the patents is not essential to a claim

of induced infringement." (citations omitted)). Defendants are incorrect that an "inference [of willful blindness] is not plausible from Plaintiffs' allegations," *see* Mot. at 24, and they do not deny actual knowledge of the patents.

Third, the Complaint alleges PGD's and 2AT's specific intent that others infringe. Specifically, the Complaint alleges that PGD and 2AT "knowingly and intentionally induc[ed] others, including prospective and actual customers and retailers" to infringe by using, offering to sell, sell, and/or importing the CVD and annealed diamonds made by the infringing methods. *See, e.g.*, Compl. ¶¶ 107–08, 131–32. The Complaint also cites Defendants' "sister company" relationship and Defendants' advertising, promotion, and supply of CVD diamonds made by infringing processes, including PGD's distribution of CVD diamonds, partnerships with retailers on digital campaigns, branding and collateral support, marketing, and onsite and online training, and targeting of and sales to third-party entities. *See id*. ¶¶ 21, 24–28, 34, 54, 56, 59, 60, 101, 104, 107–09, 113, 127, 131–33, 137. Additionally, the Complaint cites Defendants' provision of loose diamonds that are used by others. *See, e.g.*, ¶¶ 21, 23, 27–28, 40, 101–03, 127–28. These allegations sufficiently describe active steps taken to induce others to infringe.

Defendants are mistaken in suggesting that *Commil USA, LLC v. Cisco Sys., Inc.*, 135 S. Ct. 1920, 1928 (2015), shields them from liability for indirect infringement if they "did not know the acts were infringing." *See* Mot. at 23. Defendants are liable if they had actual knowledge *or were willfully blind to the infringement*, and subsequent cases have reversed premature or inaccurate findings regarding that question of fact. *See, e.g.*, *Unwired Planet, LLC v. Apple Inc.*, 829 F.3d 1353, 1364 (Fed. Cir. 2016). In any event, Defendants misrepresent the Complaint, *see* Mot. at 23–24, which alleges not only that PGD's executive officer knew or should have known of the patents-in-suit given his recent patents in the same field of diamond-manufacturing, *see*

Compl. ¶¶ 60, 111–12, 135–36, but also that the patents-in-suit were "well-known in the lab-grown diamond industry, and in particular are well known by lab-grown diamond manufacturers, importers, and sellers, such as PGD [and 2AT]," *id.* ¶¶ 29, 44.

Finally, Defendants falsely equate this Complaint with the one rejected in *Gradient Enterprises, Inc. v. Skype Techs. S.A.*, 848 F. Supp. 2d 404, 409 (W.D.N.Y. 2012), and they err in characterizing *Smartwater, Ltd. v. Applied DNA Scis., Inc.*, No. 12-CV-5731 (JS) (AKT), 2013 WL 5440599, at *7 (E.D.N.Y. Sept. 27, 2013), as merely dismissing a complaint for "legal conclusion[s] couched as . . . factual allegation[s]." *See* Mot. at 24. In those cases, the courts dismissed (with leave to amend) brief original complaints (22 paragraphs in *Smartwater* and 25 paragraphs in *Gradient*) that alleged no substantive details regarding the relevant industry and technology, the defendants' relationships or business, or their infringing activity other than conclusory allegations of infringement. *See Gradient*, 6:10-CV-06712 (W.D.N.Y. Dec. 21, 2010), ECF. No. 1; *Smartwater*, 12-CV-5731 JS AKT (E.D.N.Y Aug. 24, 2012), ECF No. 1. Here, Plaintiffs have provided significant details, as explained above.

C. Plaintiffs adequately pleaded willful infringement.

Finally, Plaintiffs have also properly pleaded willful infringement.

To plead willful infringement, a complaint must allege that "defendant was aware of the asserted patent but acted despite an objectively high likelihood that its actions constituted infringement of a valid patent.'" *3D Sys.*, 2014 WL 1904365, at *6. Conduct that is "willful, wanton, malicious, bad-faith, deliberate, consciously wrongful, flagrant, or—indeed—characteristic of a pirate," *see Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923, 1932 (2016), is evidence of willful behavior and may ultimately be necessary to win enhanced damages, but detailed proof is not required at the pleading stage. *See generally Välinge Innovation AB v. Halstead New England Corp.*, No. CV 16-1082-LPS-CJB, 2018 WL 2411218, at *2–13 (D. Del.

May 29, 2018) (in-depth analysis of willful-egregious distinction and post-*Halo* pleading standards). Moreover, for at least post-suit knowledge and willfulness, "there is no requirement that the plaintiff plead additional facts, beyond knowledge of the patent or patents, in order for a claim of willful infringement to survive a motion to dismiss." *IOENGINE, LLC v. PayPal Holdings, Inc.*, No. CV 18-452-WCB, 2019 WL 330515, at *7–8 (D. Del. Jan. 25, 2019) (Bryson, Circuit Judge, sitting by designation) (also recognizing the obstacles in pleading willful infringement given that "[t]he facts bearing on willfulness are likely to be, in large measure, in the possession of the defendant and available to the plaintiff only through discovery").

Here, the Complaint alleges that Defendants had actual knowledge of the patents-in-suit or at least acted in willful blindness of them because the existence of these patents was well-known in the lab-grown diamond industry. Compl. ¶¶ 29, 110, 134 (PGD); ¶¶ 44, 110, 134 (2AT). The Complaint further explains that Defendants each knew the manufacturing and annealing methods used to make their CVD diamonds infringed, yet continued to import, use, sell, and/or offer those diamonds for sale. *Id*. ¶¶ 29–31 (PGD); ¶¶ 44–46 (2AT); *see also id*. ¶¶ 56, 110–11, 115, 134–135, 139 (PGD); ¶¶ 59, 110, 112, 115, 134, 136, 139 (2AT) (other allegations of knowledge). The Complaint also specifically alleges that PGD, with knowledge of the patents-in-suit, has operated a factory making lab-grown CVD diamonds of Type IIa/gemstone quality and further anneals CVD diamonds to improve their characteristics, *see, e.g.*, *id*. ¶¶ 18, 21, 29–30, 51, 53, 81, 85, 123–25; uses those CVD diamonds, including to create jewelry, *id*. ¶¶ 18, 21, 23, 27, 28, 31, 51, 53, 81, 94, 101, 120, 127; operates a CVD diamond major chain for importation and distribution to U.S. retail outlets, *see id.* ¶¶ 18, 21–28, 42–43, 51, 53–60, 81, 101, 104, 106–09, 127, 130–33; and sells and offers to sell these CVD diamonds in the United States, *see id.* ¶¶ 18–23, 51–57, 81, 93–94, 104, 106–09, 115, 119–20, 129–33, 139. Likewise, the Complaint alleges the 2AT, with

knowledge of the patents-in-suit, has operated a factory making lab-grown CVD diamonds of Type IIa/gemstone quality and further anneals CVD diamonds to improve their characteristics, *see id*. ¶¶ 33, 38, 40, 58–59, 87, 91, 94, 120, 124–26; uses those CVD diamonds, including to create jewelry, *id*. ¶¶ 87, 91, 94, 101–03, 127–28; operates a CVD diamond pipeline for importation and distribution to U.S. retail outlets, *see id.* ¶¶ 39–43, 46, 58–59, 87, 91, 94, 105–06, 130; and sells and offers to sell these CVD diamonds in the United States, *see id.* ¶¶ 40, 58–60, 87, 91, 93–94, 105–09, 115, 119–20, 129–33, 139.

Thus, contrary to Defendants' assertions, see Mot. at 25, the Complaint alleges more than plausible allegations of direct, indirect and willful infringement. The cases on which Defendants rely for this point are therefore readily distinguishable. *See Gradient Enters.*, 848 F. Supp. 2d at 409; *Iron Gate Sec., Inc. v. Lowe's Cos.*, No. 15 CIV. 8814 (SAS), 2016 WL 1070853, at *5 (S.D.N.Y. Mar. 16, 2016).

D. At a minimum, Plaintiffs should be granted leave to replead

Even if the Court concludes that the Complaint has not adequately pleaded certain elements or theories, the Court should grant Plaintiffs leave to file a First Amended Complaint aimed at curing any such defects. Although neither PGD nor 2AT has provided any discovery to date, Plaintiffs can, if necessary, provide further information supporting their claims of direct, induced, and willful infringement. Defendants have not requested dismissal with prejudice, Plaintiffs have not previously amended their complaint, and there is no reason to assume that amendment would be futile.

VI. CONCLUSION

The Court should deny in its entirety Defendants' motion to dismiss. In the alternative, to the extent the Court grants any portion of Defendants' motion, Plaintiffs should be given leave to file a First Amended Complaint.

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Respectfully submitted,

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